

Executive Summary

Project Title and Applicant Name:

Title: American Basin Fish Screen and Habitat Improvement Project
Applicant: Natomas Mutual Water Company

Project Description and Primary Biological/Ecological Objectives:

This proposal requests cost share funding to complete a feasibility study, biological resource surveys, a preliminary design and environmental documentation for the American Basin Fish Screen and Habitat Improvement Project. The project involves the removal of a diversion dam, the consolidation of diversion dams, and the addition of state-of-the-art fish screens for Natomas Mutual Water Company (NMWC) diversion on the Sacramento River and its tributaries. The specific objective of the project is to remove migration barriers, and prevent straying and entrainment of winter-run Chinook salmon, spring-run Chinook salmon, fall-run Chinook salmon, late fall-run Chinook salmon, steelhead trout, splittail, greenhead sturgeon, and other high risk species.

Approach/Tasks/Schedule:

NMWC's intended approach is to complete the feasibility study, preliminary design, and environmental documentation in consultation with the responsible resource agencies, finalize the environmental documentation, obtain the necessary permits, procure the required right-of-way, obtain bids for construction, perform the relocation work, and construct the fish screen facility. The design, environmental documentation, and administration of the work will be performed by NMWC with the assistance of consultants.

The project phases for which funding is requested are Phase I – *Feasibility Study* and Phase II – *Preliminary Design and Environmental Documentation*. The primary tasks being performed under Phase I are the development of a preliminary design and completion of the environmental documentation for the project. Phase I is scheduled for completion by October 1998. Phase II is scheduled for completion by April 1999.

Justification for Project and Funding by CALFED:

Migration barriers and entrainment losses at unscreened diversions result in direct mortality to fishery resources, which have been identified as a principle stressor by CALFED. Reductions in direct entrainment mortality at unscreened diversions, particularly those located within critical fisheries habitat of the Sacramento – San Joaquin Bay-Delta system, have been identified as a high priority action. NMWC's diversions are located within the area of the Sacramento River designated by the National Marine Fisheries Service (NMFS) as critical habitat for winter-run salmon. Biological monitoring at the site has documented that winter-run, spring-run, fall-run, and late fall-run sized juvenile Chinook salmon, steelhead, splittail, and other sensitive resident and migratory fish species are currently entrained at this unscreened diversion. The project is, therefore, consistent with identified stressors and priorities for project funding by CALFED. In addition, the project represents a cooperative effort, with involvement in the design by U.S. Fish & Wildlife Service (USFWS), U.S. Bureau of Reclamation (USBR), California Department of Fish & Game (DFG), and NMFS, with significant financial matching support through the CVPIA Anadromous Fish Restoration Program.

Budget Costs and Third Party Impacts:

NMWC is seeking a \$200,000 cost share for the feasibility and preliminary design phases of the project. The amount requested represents fifty percent (50%) cost share of these phases of the project. The balance of funding for these phases will be paid for by the federal government. NMWC has paid all costs to date for the project. The only third party impact from the project, is the need to acquire right-of-way for the project. The acquisition will be made at fair-market value.

Applicant Qualifications:

The project will be managed by the District with the assistance of their Engineer, Ensign & Buckley Consulting Engineers (EB), heir Environmental Consultant, Hanson Environmental, Inc. (Hanson), and Miriam Green Associates (MGA) and their fisheries biologist. EB has provided engineering services to NMWC for over 12 years, and has provided services in the planning, design, and construction of over 10 fish screen projects in the State of California. MGA has prepared environmental documents for over 300 projects. Hanson has provided monitoring services and fish screen projects in the State of California.

Monitoring and Data Evaluation:

Extensive fisheries monitoring has been performed at on the Sacramento River to document the species composition, seasonal occurrence, and size distribution of juvenile and adult fish entrained by unscreened diversions. Data from this monitoring provides a basis for predicting biological benefits associated with the project. Monitoring of the screen performance has been incorporated into the project and will be performed in consultation with the DFG and the NMFS. Effectiveness of the fish screen will be determined by compliance with NMFS/DFG fish screening criteria.

Local Support/Coordination with Other Programs/Compatibility with CALFED Objectives:

NMWC's shareholders, the local agencies, and water purveyors have expressed support for the project. NMWC has provided funding for the project to date, and expects to provide future financial support for the project.

The work for this project is being coordinated with the CVPLA Anadromous Fish Restoration Program (AFRP), through consultation with its technical team. Coordination with the AFRP technical team will be continued though the design, construction, and testing phases of the project.

The removal of migration barriers, prevention of straying, and screening of diversions is consistent with the identified stressors and priorities for project funding by CALFED. The prevention of entrainment of high risk fish species will result in a significant improvement in the aquatic habitat of the Sacramento - San Joaquin Bay-Delta system.

Approach/Tasks/Schedule: